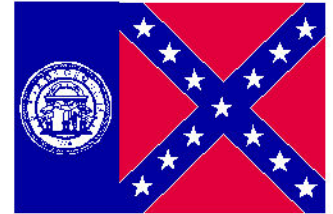




NOAA Research in Georgia



GA-1 through 11 (Statewide)

Climate and Global Change Program

NOAA is responsible for providing climate information to the nation in order to prepare and protect climate sensitive sectors of society and the economy. To carry out this mission, NOAA's Climate and Global Change Program conducts focused scientific research to understand and predict variations of climate. The Program is comprised of a number of research elements, each focusing on a specific aspect of climate variability. Taken together, this research contributes to improved predictions and assessments of the effects of climate variability and change on different environments over a continuum of time scales from season to season, year to year, and over the course of a decade and beyond. This research is accomplished through the strong support of the academic and private sectors, as well as NOAA and other federal laboratories. In FY 2001, NOAA's Climate and Global Change Program provided approximately \$356,600 in support of climate research in the State of Georgia. For more information please visit <http://www.ogp.noaa.gov>

GA-1, 5, 11 (Based in Athens, Brunswick, and Atlanta - serves entire Georgia coast)

National Sea Grant College Program

Georgia Sea Grant College Program

The Georgia Sea Grant College Program, part of the National Sea Grant College Program, is a statewide program of research, education, and extension services that works to promote the wise use of marine resources. Current research projects target coastal management issues using coastal ecosystem modeling, eutrophication, impact of freshwater withdrawal, marine biotechnology, fish health and aquaculture training for minorities. Georgia Sea Grant partners with the Marine Extension Service, located Brunswick and Atlanta, to help develop the seafood industry, marine business and aquaculture industries and address conservation engineering, seafood safety, and water quality issues. They also provide educational opportunities for students, interns, and the public to learn about the marine environment, its processes and resources. Seven universities and research institutes participate in Georgia Sea Grant. The Georgia Sea Grant College Program is headquartered at the University of Georgia, Athens. In FY 2001, Georgia Sea Grant projects received funding of approximately \$1.2 million from the National Sea Grant College Program. For more information please visit <http://alpha.marsci.uga.edu/gaseagrant.html>

GA-1 (coast)

Atlantic Oceanographic Meteorological Laboratory Hurricane Research

The Atlantic Oceanographic Meteorological Laboratory (AOML) Hurricane Research Division (HRD) conducts an annual field program during peak hurricane season, flying NOAA's two WP-3D Hurricane Hunter aircraft into all hurricanes threatening US coastlines. Dropsondes and onboard radar are used to profile hurricane winds and storm structure. HRD scientists then transmit real-time information to the National Hurricane Center (NHC) at the Tropical Prediction Center, one of NOAA's National Centers for Environmental Prediction (NCEP). An HRD workstation at NHC processes the aircraft data to generate products for hurricane specialists. NOAA's G-IV jet is also used in the field program to profile wind currents surrounding and influencing the storm's track. HRD scientists incorporate these and other data to create wind analyses of hurricanes. These analyses are crucial in identifying regions of strong winds in the storm and are distributed to local emergency managers for hurricane warning and evacuation determinations. HRD scientists are also studying the characteristics of hurricane winds before and after landfall to help determine expected wind impacts as a hurricane moves over land. For more information please visit <http://www.aoml.noaa.gov/hrd/index.html>

GA-1 (coastal waters)

National Undersea Research Program National Undersea Research Center for the Southeastern U.S. and Gulf of Mexico

The National Undersea Research Center for the Southeastern U.S. and Gulf of Mexico is located at the University of North Carolina at Wilmington. It is one of six regional centers supported by the National Undersea Research Program (NURP). The center supports and conducts undersea research throughout the South Atlantic Bight (NC to FL), Florida Keys, and Gulf of Mexico. The Center provides research support for in situ oceanography conducted by divers, submersibles and remotely operated vehicles. Key research includes studies of the health of coastal reef systems in the Florida Keys, studies of marine fisheries population dynamics/habitat associations/recruitment processes, support of research on lithospheric resources and processes (including those related to offshore oil drilling, gas hydrates, climate change, sea level history, and sea floor evolution) and carbon cycling as it concerns the air-sea interaction in global warming. In FY 2001 the Center at Wilmington received funding of \$2.64 million. For more information please visit <http://www.uncwil.edu/nurc/>

GA-1 and 8 (Savanna and Macon)

Forecast Systems Laboratory GPS Meteorological Observing Systems

NOAA's Forecast Systems Laboratory (FSL) operates a rapidly expanding network of GPS Meteorological (GPS-Met) Observing Systems to monitor the total quantity of precipitable water vapor in the atmosphere. Currently, there are 93 systems over the contiguous 48 states and Alaska, and plans are being made to extend these observations to Hawaii, Puerto Rico, the Caribbean Islands, and Central America. Water vapor is an important but under-observed component of the atmosphere

that plays a major role in severe weather events and the global climate system. GPS-Met systems provide accurate water vapor measurements under all weather conditions, including thick cloud cover and precipitation, and do so at very low cost. The major reason why this system is so economical is that the network is being developed by FSL in cooperation with federal, state and local government agencies, universities, and the private sector. The GPS stations provide high-accuracy surveying and navigation services for National defense, automated agriculture, safe land and marine transportation, government infrastructure management, and 911 emergency response services. Fortuitously, these systems can also be used for meteorology with the addition of surface weather sensors. GPS-Met systems located in Georgia include sites operated by the U.S. Department of Transportation near Savanna and Macon. For more information please visit <http://www.gpsmet.noaa.gov/jsp/index.jsp>

GA-3 (Panola Mountain State Park)

Air Resources Laboratory Atmospheric Integrated Research Monitoring Network

AIRMoN, or Atmospheric Integrated Research Monitoring Network, is an array of sampling stations designed to quantify the extent to which changes in emissions affect air quality and deposition. NOAA's Air Resources Laboratory operates both elements of the network, AIRMoN-Wet and AIRMoN-Dry. The goal of AIRMoN-Dry is to identify and understand the processes that cause the deposition of atmospheric pollutants without the presence of precipitation in order to quantify dry deposition rates at locations where direct measurement is not possible. An AIRMoN-Dry station is located in the Panola Mountain State Park. Prime users of these data include ecologists, agriculturists, foresters, and power companies affected by Clean Air Act legislation. For more information please visit <http://www.arl.noaa.gov/research/programs/airmon.html>

GA-5 (Atlanta)

Air Resources Laboratory Research Collaboration

Researchers at the Georgia Institute of Technology in Atlanta are conducting a joint project with NOAA scientists from the Air Resources Laboratory in Oak Ridge, Tennessee, to evaluate the use of a semi-continuous aerosol analyzer to provide improved estimates of dry deposition, the process by which gases are removed from the atmosphere upon contact with surfaces. For more information please visit <http://www.atdd.noaa.gov>

For further information about these and other NOAA programs, please contact NOAA's Office of Legislative Affairs at (202) 482-4981.

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